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TRANSMITTAL OF APPEAL BRIEF

Docket No.
30679/39713

In re Application of: Barry Algren

Application No.
10/772,811-Conf. #5957

Filing Date
February 5, 2004

Examiner
A. F. Kovacs

Group Art Unit
3671

Invention: MOTORIZED GRAIN SCOOP

TO THE COMMISSIONER OF PATENTS:

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: May 31, 2006

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Dated: July 14, 2006

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Dated: July 14, 2006 Signature: _____

(Randall G. Rueth)

Docket No.: 30679/39713
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Algren et al.

Application No.: 10/772,811

Confirmation No.: 5957

Filed: February 5, 2004

Art Unit: 3671

For: Motorized Grain Scoop

Examiner: Árpád Fábíán Kovács

APPEAL BRIEF IN ACCORDANCE WITH 37 C.F.R. § 41.37

MS Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

This Appeal Brief is being submitted in accordance with 37 C.F.R. § 41.37 following the Notice of Appeal filed May 31, 2006 in this application.

(i) Real Party in Interest

The real party in interest is Barry Algren and Michael Asher, inventors of this application as evidenced by the declaration document filed on February 5, 2004. The inventors have made no assignment of title in this invention.

(ii) Related Appeals and Interferences

There are no related appeals or interferences known to the appellants or the appellants' legal representative which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

(iii) Status of Claims

Claims 1-23 are pending and at issue in this case. Each of claims 1-23 stands rejected for the reasons provided below.

(A) Claims 1-7, 9-14, and 16-22 stand rejected as allegedly anticipated under 35 U.S.C. 102(b) by U.S. Patent No. Re. 33, 726 to Thorud et al. (hereinafter “Thorud”). Of these, claims 1, 9, and 16 are independent claims.

(B) Claims 8, 15, and 23 stand rejected as allegedly unpatentable under 35 U.S.C. § 103(a) over Thorud in view of U.S. Patent No. 3,085,832 to Guillemette (hereinafter “Guillemette”). Each of these claims is a dependent claim.

(iv) Status of Amendments

There are no amendments filed subsequent to the final rejection.

(v) Summary of Claimed Subject Matter

The subject matter defined by independent claims 1, 9, and 16 is generally directed to an apparatus for moving particulate matter. More particularly, the subject matter of these claims is directed to an apparatus having a body including a motor, a cavity having a first side, a second side, and at least a partial semi-circular cross-sectional shape, and a drive housing disposed on the body. The apparatus further includes a paddle assembly including a shaft having a plurality of paddles disposed therefrom. Each paddle has a bottom wall that is arcuate about an axis parallel to the shaft and is sized to extend between the first side and the second side of the cavity along an entire width of the paddle in a substantially planar manner. Furthermore, each paddle includes a distal end that travels along the semi-circular cross-sectional shape of the cavity during operation. A drive mechanism that is disposed in the drive housing operatively connects the motor and the main shaft. In operation, the motor

drives the shaft and, as a result, turns the paddles in a circular motion about the shaft. The cavity or open region gathers and confines an amount of particulate matter for a brief period before the matter is thrown away from the rotating paddles.

As described in Fig. 1, a motorized grain scoop 20 includes a body 22, a drive housing 24, a drive mechanism 26 (Figs. 3 and 4), a paddle assembly 28, and a motor 30. The body 22, as illustrated in Fig. 1, may be constructed from a number of materials, including but not limited to, plastics, metals, composites, wood, and/or a combination thereof, and includes a cavity 32, disposed toward a front 34 of the body 22. The cavity 32 includes a first side wall 36, a second side wall 38, and a rear wall 40 (Fig. 2). The first and second side walls 36, 38 are oriented generally parallel to each other, and the rear wall 40 is oriented generally perpendicular to both the first and second side walls 36, 38. The first and second side walls 36, 38 are generally planar, whereas the rear wall 40 has an arcuate shape. More specifically, as best seen in Fig. 2, the rear wall has a semi-circular shape, sized and shaped to correspond with at least a portion of the paddle assembly 28. As such, the first and second side walls 36, 38, and the rear wall 40 define the cavity 32. *See Application Specification, p. 4, lines 8-18.*

The paddle assembly 28, as best seen in Figs. 2 and 3, includes the shaft 48 and a plurality of paddles 56. A first end 58 of the shaft 48 is disposed in the drive housing 24 and is fixedly attached to the second sprocket 52 (Fig. 3). A pair of bearings 60, the first bearing 60a being disposed in the first side wall 36 and the second bearing 60b being disposed in the second side wall 38, support and/or enable smooth movement of the shaft 48 in the body 22. As such, a second end 62 of the shaft 48 is disposed in the second bearing 60b, leaving the majority of the shaft 48 disposed in the cavity 32 of the body 22. *See Application Specification, p. 6, lines 15-22.*

The one or more paddles 56, as best seen in Figs. 2 and 3, are disposed on the shaft 48, and more specifically, extend radially outward from the shaft 48. A proximal end 64 of the paddles 56 is fixedly attached to the shaft 48 at a rear wall 66 of the paddles 56, and more specifically, may be attached to the shaft 48 with one or more fasteners 68, such as bolts, screws, etc. The paddles 56, as seen in Fig. 6, may further include a bottom wall 70, that extends from the proximal end 64 of the paddles 56 to a distal end 72 of the paddles 56, and a pair of sidewalls 74, 76 that may be disposed on either side of the paddles 56, such that the sidewalls 74, 76 extend from the rear wall 66 or proximal end 64 of the paddles 56 to the distal end 72 of the paddles 56. *See* Application Specification p. 6- lines 23-25 and 7, lines 23-7.

The bottom wall 70, as seen in Fig. 5, has an arcuate cross-sectional shape, as taken along a length of the paddle 56, that extends outwardly from the shaft 48 and then curves toward the direction of rotation of the paddles 56. When combining the bottom wall 70 with the rear wall 66, it may be said that the arcuate bottom wall 70 extends outwardly from the shaft 48 first away from and then toward the direction of rotation of the paddles 56. *See* Application Specification p. 7, lines 8-13.

Similarly, the bottom wall 70, as seen in Fig. 6, is substantially planar or linear, as taken along a width of the paddle 56. As such, an open region 78 is created on the paddles 56 that is defined by the rear wall 66, the bottom wall 70, and the pair of side walls 74, 76. For clarity, the width of the paddle 56, as discussed herein, may be defined as the distance between the first side wall 74 and the second side wall 76 of the paddle 56, and/or the distance of the paddle 56 along an axis parallel to the shaft 48 of the paddle assembly 28. Similarly, the length of the paddle 56 may be defined as the distance between the rear wall 66 and the distal end 72 of the paddle 56, and/or the distance of the paddle 56 along an axis

perpendicular to the shaft 48 of the paddle assembly 28. *See* Application Specification p. 7, lines 14-23.

The size and shape of the paddles 56, as best seen in Figs. 2 and 9, may be designed and/or constructed to correspond to the size and shape of the cavity 32. More specifically, the length of the paddles 56 may be such that the distal ends 72 of the paddles 56, during rotation of the paddle assembly 28, track along and/or correspond to the semi-spherical shape of the rear wall 40 of the cavity 32. Similarly, the width of the paddles 56 may be such the side walls 74, 76 of the paddles 56 extend from the first side wall 36 of the cavity 32 to the second side wall 38 of the cavity 32 (Fig. 1). *See* Application Specification, p. 7-8, lines 24-6.

In operation, the motorized grain scoop 20 may be used to move and or transfer particulate matter, including but not limited to, grain such as wheat, corn, etc., and other farm related products from a first location to a second location. In this exemplary embodiment, however, the grain scoop 20 will herein be described as being utilized to move grain in a grain repository to an exiting auger (not shown). The user may first place the motorized grain scoop 20 into the grain repository by lifting the grain. The user may connect the motor 30 to an electrical source by connecting the electrical connector or cord 88, and more specifically, by plugging the electrical connector or cord 88 into an extension cord or other electrical source. By utilizing the controller/switch 82, the user may activate or deactivate the motor 30 and/or control the speed of the motor 30 during operation. Once the motor 30 has been activated, the rotational speed of the paddle assembly 28 may be in the range of 350 rpm to 525 rpm, and more specifically, may be at approximately 438 rpm so as not to crush or otherwise harm the particulate matter. *See* Application Specification, page. 11, lines 10-25.

As the user causes the motorized grain scoop 20 to contact the grain, the grain will be scooped by the paddles 56 into the cavity 32 and will be thrown in a forward direction from the motorized grain scoop 20. Prior to the paddles 56 entering the cavity 32, the paddles 56 will engage and scoop the grain into the open region 78 of the paddle 56. More specifically, as seen in Fig. 9, the distal end 72 of the paddle 56 will contact the grain and begin scooping the grain into the open region 78 as the paddle assembly 28 rotates into the bottom of the cavity 32. As the paddle 56 rotates inside the cavity 32, rotation force will cause the grain to traverse/slide along the bottom wall 70 until it reaches the distal end 72 of the paddle 56 and, as the paddle exits the top of the cavity 32, the grain is thrown in a forward direction from the motorized grain scoop 20. *See Application Specification, p. 12, lines 1-10.*

Thus, the claimed motorized grain scoop and the design and shape of the paddle assembly is particularly suited to moving particulate matter such as grain.

(vi) Grounds of Rejection to be Reviewed on Appeal

The Applicants appeal from the final rejection of claims 1-7, 9-14, and 16-22 as allegedly anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. Re. 33, 726 to Thorud et al. (hereinafter “Thorud”). Further, Applicants appeal from the final rejection of claims 8, 15, and 23 as allegedly obvious over Thorud in view of U.S. Patent No. 3,085,832 to Guillemette (hereinafter “Guillemette”).

(vii) Argument

The Examiner maintains the rejections of claims 1-7, 9-14, and 16-22 as anticipated by Thorud. The Examiner’s rejections should not be upheld for reasons best summarized in a discussion of independent claims 1, 9, and 16, dependent claims 2 and 17, and dependent claims 8, 15, and 23. In summary, however, the Examiner has failed to provide factual

support for the rejections sufficient to establish that Thorud teaches every element of the Applicant's claimed invention and the rejections should be withdrawn.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F. 2d 628, 631 (Fed. Cir. 1987). To establish a *prima facie* case of anticipation, a single prior art reference must disclose each element [or limitation] of the considered claim. *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1540, 1554 (Fed. Cir. 1983). However, it is not enough that the reference disclose all claimed limitations in isolation. Rather, the reference must disclose all claimed limitations "arranged as in the claim." *Lindermann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984). Thus, even if the reference includes all claimed limitations, if the arrangement of the claimed limitations is different from the arrangement of the prior art limitations, anticipation cannot be present. The burden of establishing anticipation is initially on the examiner, but once established, the *prima facie* case of anticipation must be rebutted by the applicant.

The Applicants submit that the Examiner has failed to establish a *prima facie* case of anticipation, but has instead improperly interpreted Thorud as disclosing all limitations as arranged in claims 1, 9, and 16. Additionally, Applicants submit that claims 1, 9 and 16 are distinguishable from and allowable over the cited reference. The Applicants therefore respectfully request the Board reverse the final rejection of claims 1-23 as unpatentable over the cited references.

A. Rejection under 35 U.S.C. § 102(b) over Thorud

Claims 1-7, 9-14, and 16-22 stand rejected as being anticipated by Thorud under 35 U.S.C. § 102(b). Of these claims, claims 1, 9 and 16 are independent.

For clarity, Applicants discuss independent claims 1, 9, and 16 which are generally directed to a motorized apparatus that moves grain or other particulate matter with a plurality of rotating paddles that are uniquely designed to scoop and throw grain. More specifically, a series of paddles are mounted along a rotating shaft. The paddles have a cavity defined by the shaft, a pair of side walls, and a bottom wall. The unique shape of the bottom wall defines a cavity that scoops and throws grain during operation. In particular, claims 9 and 16 disclose a bottom wall that is arcuate about an axis parallel to the shaft. Claim 1 recites a bottom wall having a substantially planar shape between the paddle housing or body side walls and along the width of the paddle.

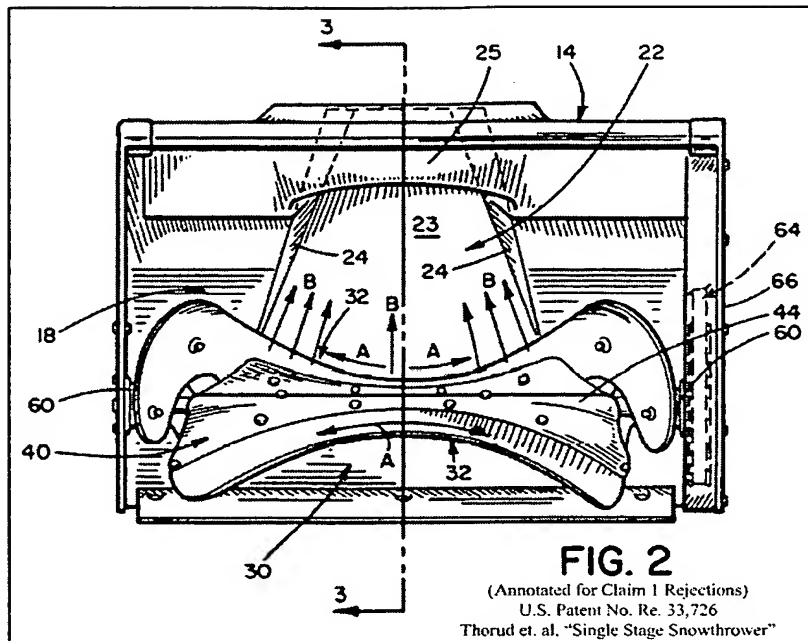
(1) Claims 9 and 16

The invention recited in claims 9 and 16 differs substantially from the apparatus disclosed in Thorud. In particular, Thorud discloses a snow blower having an impeller design including a number of rotating paddles to direct matter “upwardly in what appears as an inwardly tapering stream,...” (Col. 5, lines 43-44). The paddles direct matter upward due to the paddle “central snowthrowing section” between two end sections. (Col. 5, lines 29-30). The paddle central section is “generally concave” between the end sections and “curves forwardly in the direction of rotation of [the] impeller 30 from the midpoint to each side....” (Col. 5, lines 31-34). In other words, the generally concave paddles of the impeller are curved in such a manner as to be arcuate about an axis perpendicular to the shaft. In operation, the paddles’ “gradually increasing inwardly directed angles” force matter toward the center of the paddle (Fig. 2) until it is thrown upward by the rotation force. (Col. 5, line 38). Nothing in Thorud discloses a paddle that is arcuate about an axis parallel to the shaft that would, in operation, throw particulate matter in a forward or outward manner as recited in claims 9 and 16. In contrast, it is the entire object of Throud to force the particulate matter

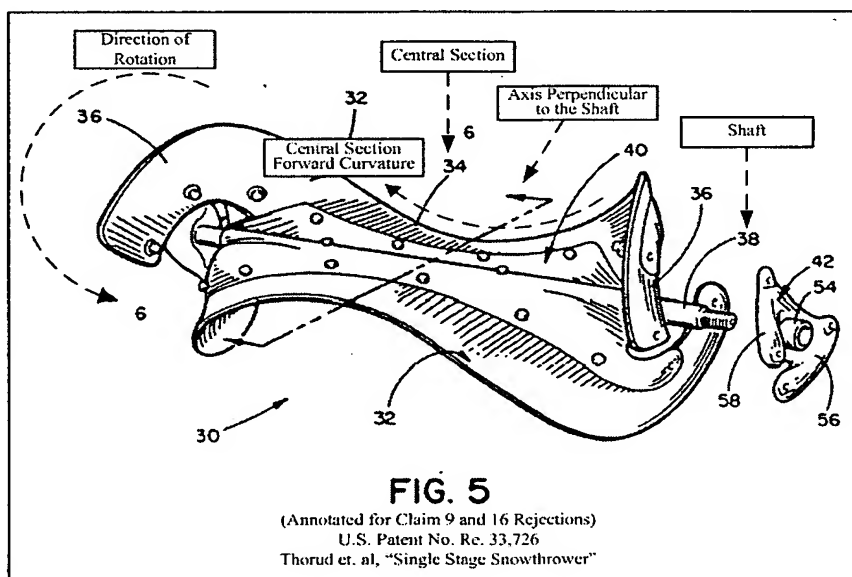
toward the paddles' concave central section before throwing the matter upward in an inwardly tapering stream. As a result, it is Applicants' contention that neither Thorud, nor any other cited reference, anticipates the invention recited by claims 9 and 16.

The cited portions of Thorud relied upon by the Examiner fail to disclose particular limitations of claims 9 and 16. For clarity, Thorud is discussed below in association with claim 9; however, the discussion below is equally applicable to Claim 16.

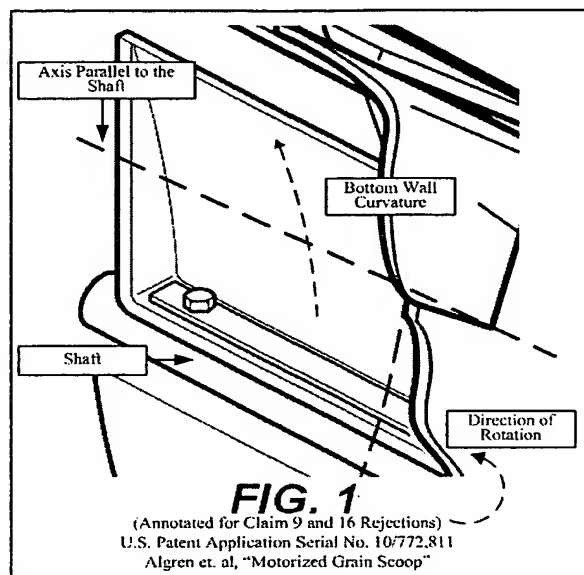
The Final Office Action of December 30, 2005, ("Final OA"), in paragraph 3 on page 5 indicates the various portions of Thorud relied on by the Examiner with respect to the recitation in claim 9 of a "bottom wall [that] is arcuate about an axis parallel to the shaft." In the Final OA, the Examiner alleges that the Thorud central section (element 34, Fig. 5) is analogous to the Applicants' bottom wall (element 70, Figs. 5 and 6) in rejecting claims 9 and 16. Rejections directed to claims 9 and 16 further allege that the form and function of the impeller paddle central section (col. 5, lines 22-45) is analogous to the Applicants' bottom wall. As described, the Thorud paddle central section is "generally concave" between the auger end sections and "curves forwardly in the direction of rotation of [the] impeller from the midpoint to each side..." (col. 5, lines 31-34). The impeller paddle relies on its curved shape to direct matter toward the center of a concave portion of the paddle before being thrown upward in an inwardly tapering stream (col. 5, lines 43-45). Illustrated by vector arrows B on Fig. 2 of Thorud, and reproduced below for convenience, the curvature of the paddle creates distinct, gradually increasing inward angles resulting in an inward and upward force upon any matter entering the area of the paddle during rotation. As further illustrated by Fig. 2, the impeller blade central section (element 34) creates the gradually increasing inward angles by "curv[ing] forwardly in the direction of rotation of the impeller from the midpoint to each side as shown in Fig. 2, arrows A." (Col. 5, lines 33-35).



Furthermore, as Fig. 5 (Annotated for Claim 9 and 16 Rejections) below clearly illustrates, and Thorud, col. 5, lines 31-35 plainly describes, the central section (34) curvature begins at the central section midpoint, then moves forward in the direction of shaft rotation toward the end sections. The central section curvature, therefore, is curved, or arcuate, about an axis perpendicular to the shaft.



In contrast, as illustrated in annotated Fig. 1 below, Applicants claim a paddle bottom wall that is “arcuate about an axis parallel to the shaft” in both claims 9 and 16. No portion of Thorud discloses this limitation.



(2) Claim 1

The “generally concave” shape of the Thorud paddle that is distinctly curved along the length of the paddle between the housing walls does not disclose a paddle bottom wall that is “substantially planar between the first side wall and the second side wall of the cavity” as recited in claim 1. Nothing in Thorud discloses a substantially planar paddle bottom wall that is substantially planar between side walls as claimed. Thus, Applicants further contend that neither Thorud nor any other cited reference anticipates the invention recited by claim 1.

The cited portions of Thorud relied upon by the Examiner in rejecting claim 1 fail to disclose particular limitations of that claim. In the Final OA, at page 3, the Examiner paraphrases claim 1 and alleges that Throude, Figs. 2 and 5 disclose:

a paddle assembly having a shaft (38) & paddles disposed therefrom (32) ...a bottom wall (34)..., the bottom wall extend[ing] along an entire width of the paddle between side

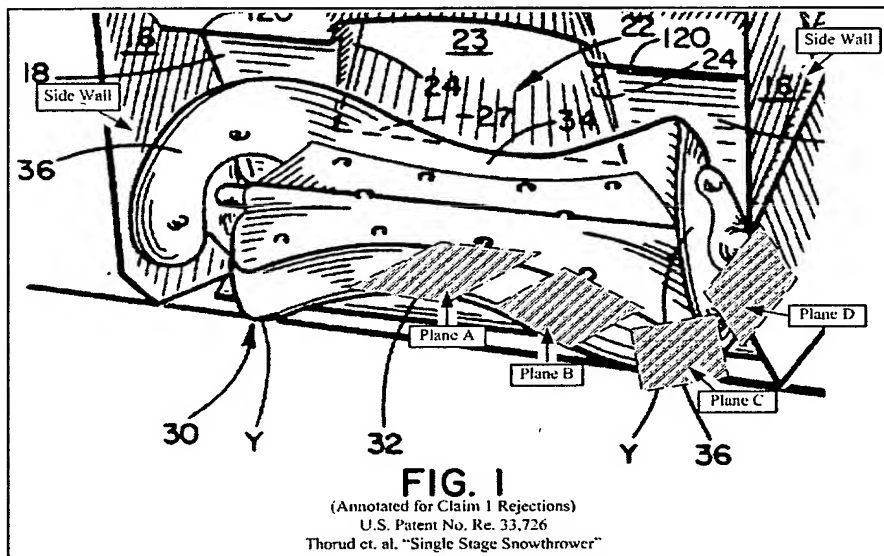
walls of the cavity and in a substantially planar manner (fig. 2 & 5).

Applicants note that the Examiner cites an improper arrangement of the claim 1 limitations.

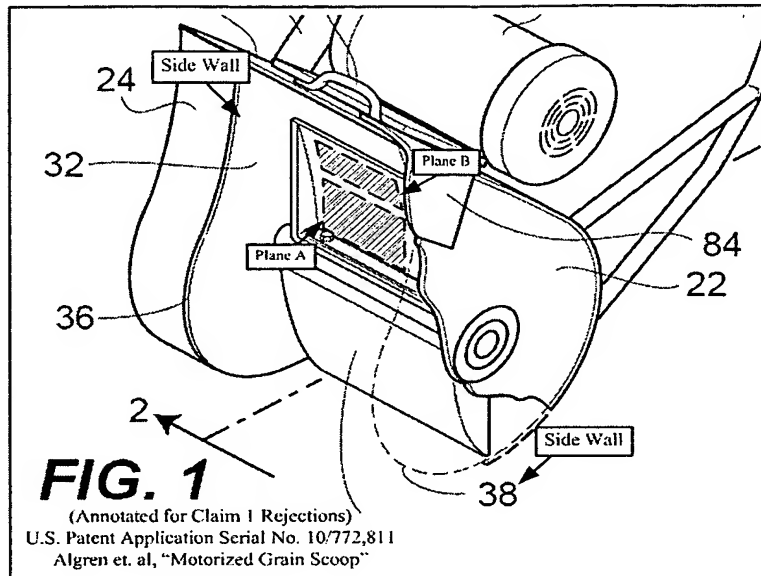
More accurately, the limitation recites:

a paddle assembly having a shaft and a plurality of paddles disposed therefrom, each paddle having a bottom wall and a distal end, ... the bottom wall extends along an entire width of the paddle in a substantially planar manner between the first side wall and the second side wall of the cavity.

As clearly illustrated in Thorud, Fig. 1 (Annotated for Claim 1 Rejections) below, the entire width of the paddle does not extend between the cavity side walls in a substantially planar manner. Rather, the pronounced curvature along entire width of the paddle 32 extends in many different planes (at least Planes A, B, C, and D) and the ends of the paddle clearly extend in a plane perpendicular to the shaft between the body side walls 16.



As illustrated in Applicants' annotated Fig. 1 below, the paddle bottom wall extending between the cavity side walls 32 and 38 is not conspicuously curved like Thorud. Rather, the Applicants' bottom wall is "substantially planar" between the cavity side walls and continues along the same plane between the body side walls 36, 38. The dimensions of both planes A and B that extend between the side walls 36 and 38 are substantially planar. A paddle having, along its entire width, a well-defined curvature that transitions within three dimensions at least 90 degrees cannot be "substantially planar" as recited in claim 1.



The Examiner has thus failed to establish a *prima facie* case of anticipation with respect to claims 1, 9, and 12 as the Examiner has failed to show that the apparatus of Thorud discloses the Applicants' claims.

(3) Dependent Claims

Dependent claims 3-8, 10-15, and 18-23 respectively depend from independent Claims 1, 9, and 16. Claims 1, 9, and 16 have been shown above to be allowable. Therefore, dependent claims 3-8, 10-15, and 18-23 are patentable as depending from an allowable base claim and as defining further distinctions over the cited reference.

Dependent claims 2 and 17 stand rejected as being anticipated by Thorud under 35 U.S.C. § 102(b). Dependent claims 2 and 17 are generally directed to a motorized apparatus as described above that includes an arcuate paddle bottom wall that extends outwardly from the shaft first away from and then toward the direction of paddle rotation.

As previously discussed in relation to the rejection of claims 9 and 16, the Thorud paddle central section is "generally concave" between the end sections and "curves forwardly

in the direction of rotation of [the] impeller from the midpoint to each side.” (Col. 5, lines 31-34). Further, as shown in Fig. 5, the impeller bottom wall never extends outwardly from the shaft “first away from and then toward” the direction of paddle rotation as recited in claims 2 and 17. Thorud merely discloses an impeller central section that curves in the direction of rotation. The central section never curves “first away from” the shaft. Thus, Applicants contend that neither Thorud nor any other cited reference anticipates the invention recited by claims 2 and 17 as dependent from claims 1 and 16, respectively.

The Examiner has thus failed to establish a *prima facie* case of anticipation with respect to claims 2 and 17 as the Examiner has failed to show that the apparatus of Thorud discloses the Applicants’ claimed invention.

B. Rejection under 35 U.S.C. § 103(b) over Thorud in View of Guillemette

(1) Claims 8, 15, and 23

Claims 8, 15, 23 stand rejected as being obvious over Thorud in view of Guillemette under 35 U.S.C. § 103(a); all of these claims are dependent.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991). The burden is initially on the examiner, but once established the *prima facie* case of obviousness must be rebutted by the applicant.

The Applicants submit that the Examiner has failed to make a *prima facie* case obviousness and that that claims 8, 15, and 23 are distinguishable from and allowable over the cited references. The Applicants therefore respectfully request the Board reverse the final rejection of claims 8, 15, and 23 as unpatentable over the cited references.

Claims 8, 15, and 23 depend from independent claims 1, 9, and 16, respectively. As discussed above in relation to claims 1, 9, and 16, Thorud cannot teach or suggest all the claim 8, 15, and 23 limitations. Further, Guillemette does not disclose at least the paddles as claimed. Therefore, because neither Thorud nor Guillemette discloses the inventions recited in claims 1, 9, and 16, the references, either alone or in combination do not disclose the claimed invention. The Examiner has thus failed to establish a *prima facie* case of obviousness with respect to claims 8, 15, and 23 as the Examiner has failed to show that, either alone or in combination, Thorud and Guillemette discloses the invention recited in the Applicant's claims.

(viii) Claims Appendix

An appendix containing a copy of the claims involved in the appeal is attached hereto as Appendix A.

(ix) Evidence Appendix

There is no additional evidence submitted in this appeal.

(x) Related Proceedings Appendix

There are no decisions rendered by a court or the Board in any proceeding identified pursuant to section (ii), above.

(xi) Conclusion

For the reasons provided above, the Applicants respectfully request that the Board reverse the final rejection of Claims 1-23 as anticipated by Thorud as applied by the Examiner.

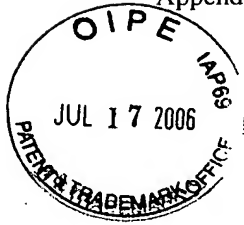
Dated: July 14, 2006

Respectfully submitted,

By 

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APPENDIX A – CLAIMS APPENDIX

1. (previously presented) An apparatus for moving particulate matter, comprising:
a body having a motor;
a drive housing disposed on the body;
a cavity disposed in the body, the cavity having a first side, a second side, and at least a partial semi-circular cross-sectional shape;
a paddle assembly having a shaft and a plurality of paddles disposed therefrom, each paddle having a bottom wall and a distal end, wherein the distal end travels along the semi-circular cross-sectional shape of the cavity during operation, and the bottom wall extends along an entire width of the paddle in a substantially planar manner between the first side wall and the second side wall of the cavity and wherein each paddle includes a pair of side walls that in combination with the bottom wall define an open region; and
a drive mechanism disposed in the drive housing, the drive mechanism operatively connecting the motor and the shaft.
2. (previously presented) The apparatus for moving particulate matter of claim 1, wherein the bottom wall of the paddles is an arcuate bottom wall extending outwardly from the shaft first away from and then toward the direction of rotation of the paddles.
3. (previously presented) The apparatus for moving particulate matter of claim 2, wherein the open region has a measurable volume for receiving and throwing grain to a desired location.
4. (original) The apparatus for moving particulate matter of claim 1, wherein the motor is an electric motor.
5. (original) The apparatus for moving particulate matter of claim 1, further including a chute disposed on the body for guiding the particulate matter in a direction.
6. (original) The apparatus for moving particulate matter of claim 1, wherein the paddle assembly rotates between 350 rpm and 525 rpm.

7. (original) The apparatus for moving particulate matter of claim 1, wherein the body is constructed from a plastic material.

8. (original) The apparatus for moving particulate matter of claim 1, wherein the particulate matter is grain.

9. (previously presented) An apparatus for moving particulate matter, comprising:
a body having a motor;
a drive housing disposed on the body;
a cavity disposed in the body, the cavity having a first side, a second side, and at least a partial semi-circular cross-sectional shape;
a paddle assembly having a shaft and a plurality of paddles disposed therefrom, each paddle having an arcuate bottom wall extending outwardly from the shaft, wherein the bottom wall is arcuate about an axis parallel to the shaft, a pair of side walls, and a distal end, wherein the side walls and the arcuate bottom wall define an open region and the distal end travels along the semi-circular cross-sectional shape of the cavity during operation; and
a drive mechanism disposed in the drive housing, the drive mechanism operatively connecting the motor and the shaft.

10. (previously presented) The apparatus for moving particulate matter of claim 9, wherein the open region has a measurable volume for receiving and throwing grain to a desired location.

11. (original) The apparatus for moving particulate matter of claim 9, wherein the motor is an electric motor.

12. (original) The apparatus for moving particulate matter of claim 9, further including a chute disposed on the body for guiding the particulate matter in a direction.

13. (original) The apparatus for moving particulate matter of claim 9, wherein the paddle assembly rotates between 350 rpm and 525 rpm.

14. (original) The apparatus for moving particulate matter of claim 9, wherein the body is constructed from a plastic material.

15. (original) The apparatus for moving particulate matter of claim 9, wherein the particulate matter is grain.

16. (previously presented) A portable apparatus for moving particulate matter, comprising:

- a body having a motor;
- a handle and at least one wheel operatively attached to the body to facilitate the moving the apparatus from a first to a second position;
- a cavity disposed in the body, the cavity having a semi-circular cross-sectional shape;
- a shaft disposed in the cavity;
- a drive mechanism operatively connecting the motor and the shaft;
- a motor housing disposed on the body;
- a drive housing disposed on the body that at least partially receives the drive mechanism; and
- a plurality of paddles disposed on the shaft, each paddle having an arcuate bottom wall, wherein the bottom wall is arcuate about an axis parallel to the shaft, a pair of side walls and a distal end, wherein the pair of side walls and the bottom wall define an open region and the distal end travels along the semi-circular cross-sectional shape of the cavity during operation.

17. (previously presented) The apparatus for moving particulate matter of claim 16, wherein the bottom wall is an arcuate bottom wall extending outwardly from the shaft first away from and then toward the direction of rotation of the paddles.

18. (previously presented) The apparatus for moving particulate matter of claim 17, wherein the an open region has a measurable volume for receiving and throwing grain to a desired location.

19. (original) The apparatus for moving particulate matter of claim 16, wherein the motor is an electric motor.

20. (original) The apparatus for moving particulate matter of claim 16, further including a chute disposed on the body for guiding the particulate matter in a direction.

21. (original) The apparatus for moving particulate matter of claim 16, wherein the paddle assembly rotates between 350 rpm and 525 rpm.

22. (original) The apparatus for moving particulate matter of claim 16, wherein the body is constructed from a plastic material.

23. (original) The apparatus for moving particulate matter of claim 16, wherein the particulate matter is grain.